

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference MTO 03 1351 0954	<div style="display: flex; justify-content: space-between;"> <div style="text-align: center;"> FOR FURTHER ACTION </div> <div> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below. </div> </div>
International application No. PCT/AU03/01202	<div style="display: flex; justify-content: space-between;"> <div> International filing date (<i>day/month/year</i>) 15 September 2003 </div> <div> (Earliest) Priority Date (<i>day/month/year</i>) 16 September 2002 </div> </div>
Applicant GENETIC TECHNOLOGIES LIMITED et al	

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of **3** sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing:

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (See Box II).

4. With regard to the title, ☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

ACTN3 genotype screen for athletic performance

5. With regard to the abstract, ☒ the text is approved as submitted by the applicant

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☒ as suggested by the applicant.

☒ None of the figures

☐ because the applicant failed to suggest a figure

☐ because this figure better characterizes the invention

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/01202

A. CLASSIFICATION OF SUBJECT MATTERInt. Cl. ⁷: C12Q 1/68; C12N 15/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

SEE ELECTRONIC DATABASE BOX BELOW

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SEE ELECTRONIC DATABASE BOX BELOW

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

[WPIDS] [CA] [MEDLILNE] [FILE REGISTRY] ACTININ; ALPHA-ACTININ; ACTN 3; ACTN3; ALPHA ACTININ 3; ALPHAACTININ 3; ATHLET?; PERFORM?; MUSCLE; SPORT?; POWER; SNP; POLYMORPHISM; GENOTYPE; MUSCUL?; MUTANT; MUTAT?

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Vainzof M, Costa CS, Marie SK, Moreira ES, Reed U, Passos-Bueno MR, Beggs AH and Zatz M (1997). Deficiency of α -Actinin-3 (ACTN3) occurs in different forms of muscular dystrophy. Neuropediatrics 28:223-228. See the entire document.	1-32
A	North KN, Yang N, Wattanasirichaigoon D, Mills M, Eastal S and Beggs AH (1999). A common nonsense mutation results in α -actinin-3 deficiency in the general population. Nature Genetics 21:353-354. See the entire document.	1-32

☒ Further documents are listed in the continuation of Box C☐ See patent family annex

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
21 October 2003Date of mailing of the international search report
27 OCT 2003

Name and mailing address of the ISA/AU

AUSTRALIAN PATENT OFFICE
PO BOX 200, WODEN ACT 2606, AUSTRALIA
E-mail address: pct@ipaustalia.gov.au
Facsimile No. (02) 6285 3929

Authorized officer

DAVID OLDE

Telephone No : (02) 6283 2569

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/01202

C (Continuation).

DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Mills MA, Yang N, Weinberger RP, Vander Woude DL, Beggs AH, Eastel S and North KN (2001). Differential expression of the actin-binding proteins, α -actinin-2 and -3, in different species: implications for the evolution of functional redundancy. Human Molecular Genetics 10(13):1335-1346. See the entire document.	1-32
P X	Yang N, MacArthur DG, Gulbin JP, Hahn AG, Beggs AH, Eastel S and North K (2003). <i>ACTN3</i> genotype is associated with human elite athletic performance. American Journal of Human Genetics 73:627-631. See the entire document.	1-32
P X	Zanoteli E, Lotuffo RM, Oliveira ASB, Beggs AH, Canovas M, Zatz M and Vainzof M (2003). Deficiency of muscle α -actinin-3 is compatible with high muscle performance. Journal of Molecular Neuroscience 20:39-42. See the entire document.	1-32